portable unit so that the portable unit initiates and stops certain timer functions while the base unit has the loudspeaker and adequate power supply to make announcements for all to hear.

In contrast, the location of the visual display (at the end of the racket) limits the Davis invention's usefulness to informing just one person, the player holding the tennis racket. It is not only structurally different; but also the Davis invention is incapable of performing the function of informing multiple persons simultaneously of the state of key time events in the game.

Martin and Davis' inventions cannot logically be combined

The two inventions are highly divergent and teach away from each other. The Davis invention is intentionally designed to provide feedback for one player only for his personal improvement. The Martin patent is intended to communicate to both players simultaneously (with the option of announcing to spectators also) the present state of the score. Their structural differences support their opposing intentions. One (Martin) uses a wireless system to assist in communicating information to others. The other invention (Davis) avoids a wireless mechanism because it is personal information that helps prevent a situation in which "...he or she may be penalized."

There is no suggestion or implication that Martin and Davis' inventions be combined.

The two inventions are so structurally different, with such divergent purposes, that there is no hint in either patent about the desirability of such a combination. It is highly unlikely that either would propose a combination of their two inventions because of their divergent purposes.

The Martin and Davis inventions cannot legally be combined

In order for prior art references to be combined, there must be suggestion of such a combination in the references themselves.

In re Sernaker, 217 U.S.P.Q. 1, 6 (C.A.F.C. 1983):

"Prior art references in combination do not make an invention obvious unless something in the prior art references would suggest the advantage to be derived from combining their teachings." [Emphasis added.]

In orthopedic Equipment Co. v. United States, 217 U.S.P.Q. 193, 199 (CAFC 1983): "It is wrong to use the patent in suit [here the patent application] as a guide through the maze of prior art references, combining the right references in the right way to achieve the result of the claims in suit [here the claims pending]. Monday morning quarterbacking is quite improper when resolving the question of nonobviousness in a court of law [here the PTO]."

In Uniroyal, Inc. v. Rudkin-Wiley Corp., 5 U.S.P.Q.2d 1434 (C.A.F.C. 1988), "[w]here prior-art references require selective combination by the court to render obvious a subsequent invention, there must be some reason for the combination other than the hindsight gleaned from the invention itself . . . something in the prior art must suggest the desirability and thus the obviousness of making the combination." [Emphasis added.]

In Ex parte Levengood, 28 U.S.P.Q.2d 1300 (P.T.O.B.A.&I. 1993):

"In order to establish a prima facie case of obviousness, it is necessary for the examiner to present evidence, preferably in the form of some teaching, suggestion, incentive or inference in the applied prior art, or in the form of generally available knowledge, that one having ordinary skill in the art would have been led to combine the relevant teachings of the applied references in the proposed manner to arrive at the claimed invention ... That which is within the capabilities of one skilled in the art is not synonymous with obviousness ... Accordingly, an examiner cannot establish obviousness by locating references which describe various aspects of a patent applicant's invention without also

providing evidence of the motivating force which would impel one skilled in the art to do what the patent applicant has done." [Emphasis added.]

No evidence was presented in the Office Action to support the contention that one having ordinary skill in the art would have been led to combine the relevant teachings of the applied references in the proposed manner to arrive at the claimed invention.

The Present Invention provides a new, useful, and unexpected result

Currently there is no practical way for players to monitor and control timing in an informal, unofficiated sports game with the quality of time control similar to that of an officiated game (in which there are referees, a time keeper, timing devices and large displays).

Consider the options currently available to a small group of persons who want to play an informal game of basketball in a playground or driveway, and who would like to time the game and shot clock:

- (a) An ordinary clock is unsatisfactory. Players would have to continually look at the clock and mentally calculate remaining time.
- (b) A player uses a stop watch for the shot clock. This player has to frequently look at the stop watch to determine when the shot time is up - all the while not concentrating on the game -- and then hope the opposing team believes him.
- (c) A large display, perhaps similar to those used in school auditoriums, but portable, is impractical. To be seen at half-court the display must be large, which will also tend to make it heavy and expensive. To be seen by all, it would have to be raised up, perhaps suspended from a tree or hung on a fence. This is clearly not practical for a pickup game.
- (d) Players tape record an officiated game and play it back during their game. It will have all the exciting sounds of an officiated game, but the calls to stop the game clock or start the shot clock on the tape will have no meaning in the pickup game unless

someone manually turns the playback on and off at the appropriate times. This is clearly not practical.

Thus the new and useful result of the present invention is that it allows players in an informal, unofficiated game to have the same timing capability as in officiated games by using a small, portable, inexpensive box with a speaker. This is an unexpected result of switching from a visual display to audible announcements.

A further unexpected result is that the present invention not only communicates timing information in a fair manner to all players simultaneously, but can duplicate the sounds of an exciting officiated game including the prerecorded voice of famous announcers, crowd noise, and the end-of-time horn – all at appropriate times in the unofficiated game.

The Second timer is not a duplication

Applicants respectfully submit that the second timer is not a mere duplication of the first timer. The primary ("game") timer always progresses in the same direction, from maximum game time, which occurs at the beginning of the game, to "0" time remaining, which occurs at the end of the game.

The secondary timer is started at a time based on a human decision about play action and proceeds to decrement until its time runs out or a shot is played or the game is ended. Most of the time it will never reach "0" time remaining because that would incur a penalty for the offensive team and they would avoid that situation. For example the secondary timer might run from 25 seconds to 5 seconds at which time it would be reset to 25 seconds, ready for the next shot clock call. Thus time on the secondary timer both decreases and increases.

It can be seen that the range of time, the purpose, and the mode of operation of the primary and secondary timers is substantially different. The two timers are also

essentially independent. The secondary timer can be started and stopped, while the primary game timer operates continuously.

Conclusion

Applicants respectfully request that the application be reconsidered in light of the enclosed exposition as well as the revision of the Abstract, Figure 1, Claims, and Specification.

Very respectfully,

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I hereby certify that this correspondence, and attachments, if any, will be deposited with the United States Postal Service by First Class Mail, postage prepaid, in an envelope addressed to "Box Non-Fee Amendments, Assistant Commissioner for Patents, Washington, DC 20231" on the date below.

May 20, 2003

Inventor's Signature: Atphen M. Henn